## UNCLASSIFIED

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# **AUTHORITY**

Affairs Office, Washington, DC 20310.

30 Nov 1983, DoDD 5200.10; AGO ltr, 29 Apr 1984

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DEPARTMENT OF THE ARMY OFFICE OF THE ADJUTANT GENERAL WASHINGTON, D.C. 20310

DAAG-FAP-A (N) (19 Oct 71) DAFD-OTT

4 November 1971

SUBJECT: Operational Reports - Lessons Learned, Artillery Reports - 8th Bn, 4th Arty; 7th Bn, 8th Field Arty; 52d Arty Gp, and 108th

Arty Gp for Period Ending 30 April 1971 (U)

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1. Section 2 of reports, subject as above, are forwarded for review and evaluation in accordance with para 4b, AR 525-15.

- The information contained in these reports is provided to insure that lessons learned during current operations are used to the benefit of future operations and may be adapted for use in developing training material.
- 3. Information of actions initiated as a result of your evaluation should be forwarded to the Assistant Chief of Staff for Force Development, ATTN: DAFD-OTT, within 90 days of receipt of this letter.
- 4. As Section 1 of the report is not pertinent to the Lessons Learned program it has been omitted.

BY ORDER OF THE SECRETARY OF THE ARMY:

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1. DAFD-OTT 711075

2. DAFD-OTT 711026

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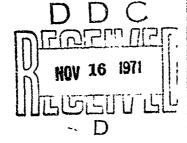
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(Distribution continued on page 2)

VERNE L. BOWERS

Major General, USA The Adjutant General



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Substitute Operational Ecoport - Lossons Locarned, 8th Bn, 4th Artillery for Period Ending 30 April 1971; RCS CSFOR-65 (R3) (U)

- 2, (C) LESSONS LEARNED: COMMANDER'S EVALUATIONS, RECOMMENDATIONS, AND
  - a. Parsonnel:
- (1) Observation: A close working relationship is necessary between direct support maintenance units and battalion/battery maintenance personnel during mobile, extended field operations to reduce the periods of equipment down time.
- (2) Evaluation: During the Lem Son, 719 operation there was a "contact team" attached to this unit from the direct support maintenance unit. "This proved to be extremely effective in reducing the amount of down time for artillery pieces.
- (3) Recommendation: It is recommended that during extended field operations, r mobile contact team be attached to each artillery britalion from the direct support maintenance unit.
  - b. Intelligence: None
  - c. Operations:
    - (1) Employment of heavy artillery
- (a) Observation: Heavy artillery, positioned forward of major moneuver elements and supporting light and/or medium artillery, cannot provide quick morter and counter battery fire in their own defense.
- (b) Evaluation: Idmited on carriage traverse capability of the M110/M107 (100m left and right for 175mm) fragmentation shields, and the eight to fifteen minutes necessary to relay, seriously limits the M110/M107 as an effective counter battery weapon.
- (c) Recommendation: It is recommended that heavy artillery not be employed independently in an environment that is subject to enemy direct and indirect fire attacks. It is further recommended that if it is necessary to employ heavy artillery on the forward edge of the battle grea, that a suitable complement of light or medium artillery be co-located with the heavy unit, to insure rapid counter morter/battery fires.

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## SUMMER Operational Report - Lessons Larraed

## (2) Increase in suttorisation of 15-79

- (a) Observation: This battelion is authorized 17 erch M-79's under 1028 4350. This is not edequate for field operations where the unit is occulately responsible for its own defense.
- (b) Evaluation: In a compat environment it is desirons that each major section within the battalion be assigned/gathorized one each 18-79.
- (c) Recommendations: This unit is recommending a charge to the TURE to increase the number of 15-79's authorized to 34. The E-79 was found to provide excellent coverage of defileded positions outside the unit perimeter. The K-79 illumination round provides excellent illumination without a conspicuous smoke trail that marks defensive positions.

### (3) FSB Preparation:

- (a) Observation: Keavy artillery batteries cannot adequately prepare FSB's in an acceptable time-frame with organic equipment and personnel.
- (b) Evaluation: The clearing of the jungle growth, preparation of minimum essential grammition storage areas and gum berms with organic battalion conjument and personnel is not practical.
- (c) Recommendations: It is recommended that one (1) D-7 bulldozer be attached to a heavy artillery battalion during operations requiring displacement of heavy artillery to previously unprepared fire support bases.

## (A) Extending life of the BA-30 Battery

- (c) Observation: RA-30 batteries are frequently not available in sufficient quantities to support normal operations.
- (b) Evaluation: BA-30's are necessary in the field ortillery for continuous operations.
- (c) Recommendations: When BA-30 betteries become inoperable, it has been found that if the BA-30's are placed in direct sunlight for a period of 8 to 10 hours they will become recharged enough to be reused.
  - (5) Disintegration of sand bags in gun positions
- (a) Observation: During continued firing of heavy artillery, the concussion of the werpons cruse splitting of send bags on armo bunkers and helf way pits.

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SURFICE: Operational report - Lessons Learned

- (b) Evaluation: The practice of providing overhead cover in helf way pits utilizing send bags was rendered ineffective after long periods of heavy artillery firing due to the inability of send bags to singularly withstend the concussion and blast of firing.
- (c) Recommendation: It is recommended that powder cannisters be used as the top layer of overhead cover for these structures, providing additional protection for gun crews, assumition and preventing sand bags from solitting.
  - d. Organization: None
  - e. Logistics: None
  - f. Communications:
- (1) Observation: When it becomes necessary to co-locate the AN/CRC-142 RATT rig in the vicinity of heavy entillery, damage can be caused by the concussion of the weapon.
- (2) Evaluation: During periods then operational commitments require the location of the RATT with a heavy artillery firing element, severe damage results to the rig from the concussion shock wave even if the rig is sandbagged,
- (3) Recommendation: It was found that if the door of the RATT rig is left open during operations when firing is taking place the effects of the shockwave are negligible. During darkness the use of a blackout curtain will allow the door to remain open and not compromise light security. It is also recommended that the RATT rig not be colocated with heavy artillery firing elements except when the tectical situation demands.

#### g. Materia:

- (1) Modification for M110 and M107 Road Wheels:
- (a) Observation: The rapid response needed for providing 6400 mil firing capability demands that power shifting of heavy ertillery be accomplished quickly and without damage to tracked carriages.
- (b) Evaluation: During the course of power shifting the M107 and M110 in to new firing positions, particularly in loose soil, a build up of dirt, grass, or rocks will take place. As this material continues to increase during operations, the track is eventually forced off the road wheels causing the track to be thrown. Under these circumstances, the gun must be taken out of action in order to replace the track on the road wheels.

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JUBJECT: Operational Report - Lessons Learned

- (c) Recommendation: It is recommended that a modification work order be considered for the cutting of five holes in the outside road wheels to allow dirt, mud, ect., to have an exitway from between the road wheels. This would greatly alleviate the build-up of such material and the subsequent loss of a vehicle for this type of maintenance.
- (2) Mcdification of the M110/M107 Automotive, Power Plant, Support system.
- (a) Observation: The M110/M107 is unsuitable for sustained mobile combat operations over adverse terrain.
- (b) Evaluation: The deadline rate and equipment parts failure on the automotive carriage assembly during sustained operations experienced by this and other battalions indicate, a general overall weakness in the support system. The deadline rate during Dewey Canyon II and Lam Son 719 for this battalion on the M110/M107 was 43.3%. There was a continuous replacement of hydraulic lines and subsequent large quantities of hydraulic fluid, (OHT/OHC), because of the lack of independent zero-pressure, sealing valves at the end of each hydraulic line. The engine is the same used to power the M109, M155 SP howitzer, and is not adequate for the additional weight and increased concussion of the M110/M107. The spade assembly is not strong enough to adequately absorb the firing recoil concussion of the M110/M107 and consequently experiences repeated failures in spade lifting cylinders, spade hydraulic lines and the spade itself. The spade assembly cannot clear terrain adequately enough to provide a level firing surface. The cannon assembly itself, independent of support systems is a very effective, extremely accurate and reliable system; however, without an automotive carriage support assembly it is an overall unreliable weapon system.
- (c) Recommendations: EIRs have been submitted for improvement of the M110/M107 weapon system to include; pressure valves and bladders for fuel cells. However, it is recommended that a new support system be developed for the M110/M107 cannon assembly. Consideration should be given to a system that is airmobile, with a soft or "out of battery" recoil system, and having a limited relay sclf-propelled mobility.

H. MAX LOVE INC. FA Commanding

CF:

2 - HQ, USARPAC, ATTN: GPOP-DT, APO 96558

3 - HQ, USARV, ATTN: AVHGC-DST, APO 96375

6 - HQ, XXIV Corps, ATTN: AVII-GCT, APO 96249

AVID\_C (30 April 71) 1st Ind SUBJECT: Operational Report - Lessons Learned, 6th Lattalion, 4th Artillery, Period Ending 30 April 1971, No. CSFOL-65 (R3) (U)

Da, 114, 108th Artillery Group, APO of 96306 26 May 71

To: Commanding General, MAIV Corps Artiller, APO SF 96349

- 1. The Util for the Sth Lattalion, 4th Artillery is submitted in accordance with AR 525-15.
- 2. This headquarters concurs with the Uhili contents with the following comment:

Reference paragraph 2, two contact teams from the direct support maintenance unit are definitely an asset to a heavy artillery unit. They must, however, be trained and have necessary spare parts available in order to be effective. Tack of spare parts has been more detrimental than lack of maintenance personnel.

FOR This CO. Land Date:

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lad, FA Adjutant

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AVII-ATC (9 May 71) 2d Ind

SUBJECT: Operational Report, Lessons Learned, Headquarters, 8th Battalion, 4th Artillery, period ending 30 April 1971 RCS CSFOR - 65 (R3) (U)

DA, HQ, KXIV Corps Artillery, AFO San Francisco 96349 10 JM 371

Commanding General, XXIV Corps, ATTH: AVII-GCT, APO San Francisco 96349

- 1. (U) This headquarters has reviewed the Operational Report, Lessons Learned for the period ending 30 April 1971 from Headquarters, 8th Battalion, 4th Artillery and concurs with the report and comments of the indorsing headquarters except in paragraphs 4 and 6 below.
- 2. (C) Concur with recommendation in paragraph 2a(3), page 6, concerning contact terms. The advantages of attaching a contact term from the DS maintenance unit to an artillery battalion during field operations are obvious. Direct coordination between the supporting and supported units is the best way of effecting this arrangement.
- 3. (C) Concur with recommendation in paragraph 2c(1) (c), page 6, concerning employment of heavy artillery with the following corrections and comment.
- a. Change "Fragmentation Shield" and "the eight to fifteen minutes necessary to relay" in paragraph 2c(1) (b) to read respectively "lack of fragmentation shields" and "the time required to relay".
- b. When possible, this concept of employment is always used. Heavy artillery does have the capability of delivering rapid counter battery/rocket/mortar fires if the weapon does not require relaying.
- 4. (C) Nonconcur with recommendation in paragraph 2e(3), page 7, concerning FSB preparation.
- a. This observation was made during LAM SON 719 when this unit encountered underdeveloped and heavily jungled areas in which it was to be positioned. Engineer bulldozer support to provide fields of fire and level firing positions and to prepare bunkers for asmunition, equipment, and personnel was requested. However, this support was virtually non-existant during the initial phase of the operation. Higher priority tasks, such as preparation of the Khe Sanh Airfield and the reopening of QL9 from Vandergrift to the South Vietnam Laos border was the reason for lack of engineer support. When adequate engineer support was available it was used to prepare positions prior to occupation, enhancing the units ability to provide continuous fire support to the maneuver elements. It is recommended that artillery units be given high priority in the allocation of engineer bulldozer support during extended field operations.
- b. The training in the fabrication of field expedient and unit constructed shelters for protection against enemy attacks by fire is man-

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AVII-ATC (9 May 71) 2d Ind

EURIECT: Operational Report, Lessons Learned, Headquarters, 8th Battalion, 4th Artillery, period ending 30 April 1971 RCS CSFCR - 65 (R3) (U)

datory for all units. This reduces the requirement for Regineer support.

- 5. (C) Concur with recommendation in paragraph 2c(4), page 7, concerning extending the life of the BA 30 battery. However, this is unnecessary if proper supply procedures are followed and proper stockage levels are maintained within the unit.
- 6. (C) Nonconcur with recommendation in paragraph 2f(3), page 8, concerning the AN/GRC 142 RATT. Concur with the unit observation and evaluation, however, if the door of the AN/GRC 142 is left open during any phase of operation, dust and/or dirt will cause major damage to the equipment, especially the TT-76, TT-98, and the amplifier portion of the AN/GRC 106 radio. Further, it is a security violation to leave the door open due to the cryptographic equipment inside the shelter. The van is equipped with an air conditioning element to keep the equipment in a clean and constant environment.

FOR THE COMMANDER:

James P. Lynch

MAJ, FA Adjutant

CF: 108th Artillery Group 8th Battalion, 4th Artillery AVII-GCT (9 May 71) 3d Ind

SUBJECT: Operational Report-Lessons Learned, Headquarters, 8th Battalion, 4th Artillery, Period Ending 30 April 1977, ECS CSFCR-65 (R3) (U)

DA, Headquarters, IXIV Corps, APO 96349 28 JUN 1971

To: Commanding General, United States Army, Vietnam APO 96375

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 30 April 1971 from Headquarters, 8th Battalion, 4th Artillery and concurs with the report and the comments of the indorsing headquarters except as indicated in paragraph 2 below.

#### (C) Comments follow:

- a. Reference item concerning, "FSB Preparation", page 7, paragraph 2 c(3): Nonconcur. Concur with XXIV Corps Artillery recommendation and comments in paragraph 4 of the attached 2d indorsement. Attachment of engineer bulldozer assets is not necessary to provide the required support.
- b. Reference itam concerning "Disintegration of sand bags in gun positions", page 7, paragraph 2 c(5): Nonconcur. The powder canisters provide additional shrapnel when direct hits occur.
- c. Reference item concerning "Communications", page 8, paragraph 2 f: Concur with comment of XXIV Corps Artillery at paragraph 5 of the 2d indorsement. The security door on the AN/GRC-142 radio must be closed during all transmit and receive operations because the door prevents radiated emissions from escaping the van. The vents and the security door may be opened, utilizing the black-out curtain only while no radio operations are being conducted.
- d. Reference item concerning "Modification for M110 and M107 Road Wheels", page 8, paragraph 2 g(1): Concur. However, the unit has been advised to submit an Equipment Improvement Recommendation.

FOR THE COMMANDER:

Captain, AGC

Assistant Adjutant General

CF:

CG, XXIV Corps Arty APO 96349

CO, 108th Arty Gp AFO 96308 CO, 8th Bn, 4th Arty AFO 96269

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AVHDO-DO (9 May 71) 4th Ind

SUBJECT: Operational Report-Lessons Learned, Headquarters, 8th Battalion 4th Artillery, Period ending 30 April 1971 RCS CSFOR-65 (R3) (U)

Headquarters, United States Army Vietnam, APO San Francisco 96375 7 AUG 1971

TO: Commander in Chief, United States Army Pacific, ATTN: GPOP-FD APO 96558

This Headquarters has reviewed the Operational Report-Lessons Learned for the period ending 30 April 1971 from Headquarters, 8th Battalion 4th Artillery and concurs with comments of indorsing headquarters except as indicated below:

- a. Reference item concerning "Personnel," page 6, paragraph 2a, 1st Indorsement, paragraph 2 and 2nd Indorsement, paragraph 2. Nonconcur with recommendation in paragraph 2a(3) basic correspondence and 2nd Indorsement, paragraph 2. Contact teams should only be utilized in a support type mission. A close working relationship must definitely be maintained between the using units and supporting units to insure the best possible maintenance. Unit has been so advised.
- b. Reference item concerning "Modification for M110 and M107 Road Wheels," page 8, paragraph 2g(1) and 3rd Indorsement, paragraph 2d. Nonconcur with recommendations in paragraph 2g(1) of cutting holes in the roadwheel. Holes would probably reduce the strength of the roadwheel plus allow debris such as rocks and sticks to get caught in the holes resulting in a greater number of tracks being thrown. If tracks are properly adjusted and proper driving procedures are observed, tracks will not be thrown. Unit has been so advised.

FOR THE COMMANDER:

Cy furn: 8/4th Arty XXIV Corps

PT. AGC.

ssistant Adjutant General

GPOP-FD (9 May 71) 5th Ind (U)
SUBJECT: Operational Report-Lessons Learned, HQ, 8th
Battalion, 4th Artillery, Period Ending
30 April 1971, RCS CSFOR-65 (R3)

WQ, US Army, Pacific, APO San Francisco 96558 1 3 SEP 1978

TO: HQ DA (DAFD-ZA), WASH DC 20310

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

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M. L. MAN 1LT, AGC Asst AG

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AVGE-VF 3 May 1971 SUBJECT: Operational Report——Lessons Learned, 7th Battalion 8th Field Artillery, Period Ending 30 April 1971, RCS CSFOR-65 (R3)

- 2. (C) Lessons Learned: Commanders Observation, Evaluation and Recommendation.
  - s. Personnel: None
  - b. Intelligence:
- (1) OBSERVATIONS: Fire Support Bases need early warning of approaching enemy.
  - (2) EVALUATION:
- (a) Because of the withdrawal of duster elements, fire support base security has reached critical proportions. The attack of FSB Hlue demonstrated the need for a early warning detection system.
- (b) An extensive SENSOR DEVICE system was installed at two (2) of the firing battery locations.
- (3) RECOMMENDATION: All US fire support bases should have sensor devices installed.
  - c. Operations:
- (1) (a) OBSERVATION: The use of perimeter lighting and searchlights is negated by cyclone fencing emplaced on the bermline at fire support bases.
- (b) EVALUATION: At fire support bases much light is reflected back into the unit's position area from the chainlink fence. This glare reduces the ability of the guards to observe the defensive wire outside the berm. Painting the interior side of the screen black effectively eliminates glare from the screen.
- (c) RECOMMENDATION: The chainlink fence emplaced on the bermline at fire support bases should be painted to reduce the reflection from night lighting devices.
- (2) (a) OBSERVATION: Due to the recent de-activation of the unit, which provided convoy security a limited number of quad 50 cal vehicles are available in the III CTZ for this purpose as well as for fire support security.
- (b) EVALUATION: The reduction of this vital security element has placed the battalion's fire support bases and tactical convoys in jeopardy. The allocated M55 Quad-50 trucks are not sufficient to provide security for all elements of the battalion simultaneously, as is very often necessary.

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DOWNGRADED AT 3 YEAR INTERVALS; DECLASSIFIED AFTER 12 YEARS. DOD DIR 5200.10 AVGE-VF 3 May 1971 SUBJECT: Operational Report——Lessons Learned, 7th Eattalion 8th Field Artillery, Period Ending 30 April 1971, RCS CSFOR-65 (R3)

- (c) RECOMMENDATION: Each Battalion should be authorized replacements for the M42 Duster as an organic vehicle for fire support base security. As a minimum 4 quad 50 machine gun vehicles or 4 car, armored, light 4X4, with 7.62 machine gun, W/E XM706E1.
- (3) (a) OBSERVATION: During periods of reduced visibility, units have experienced considerable difficulty in maintaining constant observation of their tactical berm wire emplacements.
- (b) EVALUATION: A system of providing adequate lighting for fire support bases is required. This is necessary to insure the security of fire support bases during periods of reduced visibility. To overcome this difficulty units have used 8" howitzer canisters filled with diesel. When necessary the canisters would be lit to provide the necessary illumination. Experience with these canisters has shown that the heat from the burning fuel renders infared night vision devices useless. At FSB Blue a system of lights was set up around the perimeter with the option of continuous illumination or instant illumination wherever desired. This proved to be a very satisfactory solution to the problem.
- (c) RECOMENDATION: That each fire support base be provided with electrical berm lights and one 10 kw generator for perimeter defense.

- (4) (a) OBSERVATION: It is often necessary to place effective fire on known or suspected enemy locations. The use of gun pads by heavy artillery units significantly reduces the amount of spade displacement. Units which are requested to fire heavy artillery weapons from positions without gun pads need to check the lay of each piece after 5 rounds to insure that the displacement is not excessive.
- (b) EVALUATION: When firing in areas without gun pads, units need to check frequently the amount of displacement caused by the shifting of the spedes.
- (c) RECOMMENDATION: A technique which has proved effective is to call one piece out at a time, check it, relay the piece if necessary, and continue on to the next piece.
- (5) (a) OBSERVATION: Replacement of the present wood-and-paper GFT and GST is a constant problem in a tropical climate. The wood frequently swells, slides, sticks, and the paper scales deteriorate rapidly and become difficult to read.
- (b) EVALUATION: The present GFT and GST for 8" howitzer and M107 gun are affected by the tropical climate.
- (c) RECOMMENDATION: It is recommended that GFT's and GST's be constructed of aluminum and enamel similar to the Pickett military slide rule.

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AVGE-VF 3 May 1979 SUBJECT: Operational Report——Lessons Learned, 7th Battalion, 8th Field Artillery, Period Ending 30 April 1971, RCS CSTOR-65 (R3)

#### d. Organization: None

e. <u>Trainings</u> Because of the continuous turnover of experienced personnel, emphasis has been and will continue to be placed on replacement training. Replacement training has been accomplished through cyclic firing battery and fire direction center programs of instruction, battalion schools and a carefully monitored program of on the job training.

#### f. Logistics:

- (1) OBSERVATION: During this reporting period chainlink fence was requested for enclosing of fire support bases in compliance with verbal directive from the Deputy Commander IIFFV this request was disapproved by Saigon Support Command due to a determination that this material was not authorized for this purpose.
- (2) EVALUATION: This material was considered necessary for use, in the manner discribed above, by the Deputy Commanding General IIFFV. This decision should be considered adequate for issue of sufficient chainlink fence to accomplish the described mission. The function of the chainlink fence would be muti-purpose: Not only would it provide RPG protection for the fire support base, but it would also act as a perimeter barrier to prevent the infiltration of sappers into the fire support base.
- (3) RECOMMENDATION: That a determination be made by the command to decide if chainlink fence is authorized for use to enclose fire support bases and that this information be provided to all interested parties in order that the materials may be made available.

#### g. Communications:

- (1) OBSERVATION: Many AN-VRC 12 series radios have failed to operate properly due to over heating.
- (2) EVALUATION: Radios should be shielded from the direct rays of the sun and located to insure free circulation of air around the sets whenever possible. Radios which fail to operate should be allowed to cool for several hours, and then again be tested for satisfactory operation prior to evacuation to higher echelon repair.
- (3) RECOMMENDATION: That all RTO personnel be made aware of the necessity for providing proper air circulation for the AN-VRC 12 series radio.

3 Mry 1971 AVGE-VF SUBJECT: Operational Report Leasung Learned, 7th Pattalion 8th Field Artillery, Period Ending 30 April 1971, RCS CSFOR-65 (R3)

## Material:

- (1) OBSERVATION: The fuel tanks of the M107/M110 frequently crack. This necessitates the gun/howitzer being retrograded.
- (2) EVALUATION: Repeated firing of the M107/M110 causes the fuel tanks to crack. A cracked fuel tank is a cause for retrograding the gun/howitzer. The fuel tanks should not be a permanent part of the hull. The tanks should be replaceable. Modifying the weapon with new, replaceable fuel tanks would significantly prolong the weapons usefullness and would slleviate a constent maintenance problem.
- (3) RECOMMENDATION: All MIO7/MilO yearons should be modified with replaceable fuel tanks.

#### 1. Other:

- (1) OBSERVATION: Repeated firing of the 8-inch howitzer and 175mm run after the weapon has settled deeply into soft ground may result in damage to the weapons.
- (2) EVALUATION: As long as the hull remains clear of the ground, the lockout suspension system provides proper support. However, continuous firing in soft terrain causes the tracks and spade to sink into the mud until the weight of the weapon is resting on the hull rather than on the suspension system. This is a cause of ruptured fuel tanks since the tanks are part of the hull. It is also probable that damage to hydraulic lines, structural members, and drive shafts results.
- (3) RECOMMENDATION: All firing battery personnel should be aware of such "bottoming" when firing on soft ground. If detected, the weapon should be moved.

LTC, FA

Commanding

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AVGE-C (3 May 71) 1st Ind SUBJECT: Operational Report - Lessons Learned, 7th Battalion, 8th Artillery for the Period Ending 30 April 1971. RCS CSFOR (R3)

DA, HEADQUARTERS, 23D ARTILLERY GROUP, APO 96266 17 MAY 1976

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D.C. 20310

This headquarters has reviewed the semi-annual Operational Report - Lessons Learned of the 7th Battalion, 8th Artillery and concurs with operations and lessons learned during the reporting period.

FOR THE COMMANDER:

BERTRAM B. DALES

MAJ, FA Adjutant MACTR-G31-T (3 May. 71) 2d Ind

SUBJECT: Operational Report - Lessons Learned 7th Battalion, 8th Artillery for the Period Ending 30 April 1971, RCS CSFOR-65 (R3) (U)

HQ, Third Regional Assistance Command, APO San Francisco 96266 1 0 JUN 1971

THRU: Commanding General, US Army Vietnam, ATTN: AVHDO-DO, APO 96375 Commander-In-Chief, US Army Pacific, ATTN: GPOP-DT, APO 96538

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D.C. 20310

1. (U) This headquarters has reviewed the Operational Report - Lessons Learned for the period ending 30 April 1971 from Headquarters, 7th Battalion, 8th Artillery.

### 2. (C) Comments follow:

a. Reference item concerning the need for an early warning detection system for US Fire Support Bases employing Unattended Ground Sensors (UGS), page 4, paragraph 2b; concur. At present, eight US Fire Support Bases within MR 3 have UGS systems operational, four have become operational since 15 April 1971. In a dition, two bases have equipment on order and should become operational by 20 June 1971. Each Fire Support Base with a UGS system has personnel who are school trained.

b. Reference item concerning "chain link fence", page 6, paragraph 2f; concur. The concept to enclose the entire fire support base is valid. Security at the fire support bases is a recognized problem and with the reduced visibility caused by rain, perimeter wire and self defense posture take on a more important role. The critical shortage of chain link fenting makes it difficult to provide a fence for the entire perimeter, however all sensitive areas inside the fire support base, such as the fire direction center and each howitzer position, should have at least RPG protective screening and a complete enclosing fence if materials are available.

FOR THE COMMANDER:

KENHETH A. PAYANT

Major, AGC

Assistant Adjutant General

AVHDO-DO (3 May 7.) 3rd Ind

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SUBJECT: Operat onal Report-Lessons Learned, 7th Battalion 6th Field Artillery, Period Ending 30 April 1971, RCS CSFOR-65 (R3)

Headquarters, United States Army Vietnam, APO San Francisco 96375 24 AUG 1971

TO: Commander in Chief, United States Army Pacific, ATTM: GPOP-FD APO 96558

1. This Headquarters has reviewed the Operational Report-Lessons Learned for the period ending 30 April 1971 from Headquarters, 7th Battalion 8th Field Artillery and concurs with comments of indorsing headquarters with the exception of page 9, paragraph 2f and 2nd Indorsement, paragraph 2b. The current policy of this command does not authorize the replacement of existing perimeter wire with chain link fencing for general security purposes. However, approval will be given on a case-by-case basis in connection with new construction or when near total replacement of the existing security fencing is necessary and then only around permanent installations. Widespread replacement of existing fencing is not economically justifiable nor is it logistically supportable at this time. However, the use of chain link fencing for RPG protection and local security around sensitive facilities is authorized.

#### 2. Additional comments follow:

a. Reference item concerning "Operations," page 4, paragraph 2c (3): Concur. Required items should be added to the battalion headquarters MTOE to provide centralized control and issued for use at fire support bases as required. No action by USARPAC or DA is recommended.

- b. Reference item concerning "Material," page 7, paragraph 2h. Cracking of the M107/M110 fuel cell is a problem recognized by this and higher headquarters. The current repair method of welding or sealing the cracked fuel cell with epoxy compound has proven temporarily successful. In this regard, USATACOM has developed a rubber fuel cell bladder for installation in the weapons to resolve the problem. The bladder is in the prototype stage and should be undergoing reliability testing in the near future. In the meantime, incidents of cracked fuel cells may be lessened by the following unit actions:
- (1) Keep fuel cell filled to at least 3/4 capacity during firing missions.
  - (2) Avoid continuous firing from an azimuth other than center.
- (3) Discourage crews from firing the weapon with the chassis bottom out in the soft ground.

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SUBJECT: Operational Report-Lessons Learned, 7th Battalion 8th Field Artillery, Pariod Engling 30 April 1971, RCS CSFOR-65 (R3)

(4) Encourage crews to follow the spade emplacement instruction included in TM 9-2300-216-10.

Actions by this Headquarters will include continued monitoring of the fuel cell problem and evaluation testing of the new fuel cell bladder for future use. Unit has been so advised.

FOR THE COMMANDER:

CF:

7/8th Arty En

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Assistant Adjutant General

STREET AND ACTIONS -

GPOP-FD (3 May 71) 4th Ind (U)

SUBJECT: Operational Report-Lessons Learned, BQ 7th Battalion 8th Field Artillery, Period Ending 30 April 1971, RCS CSFOR-65 (R3)

HQ, US Army, Pacific, APO San Francisco 96558 28 SEP i971

TO: HQ DA (DAFD-ZA), WASH DC 20310

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

L.M. OZAKI CPT, AGC

Asst AG

AVGG\_OP 1 May 1971
SUBJECT: Operational Report-Lessons Learned of 52d Artillery Group for Period Ending 30 April 1971, RCS: CSFOR-65 (R-3)

- 2. (U) Lessons Learned: Commander's Observations, Evaluations and Recommandations:
  - a. Personnel: None
  - b. Intelligence:
- (1) Observation: 0-1 aircraft allocations during the reporting period were inadequate to meet the requirements of the 52nd Artillery Group.
- (2) Evaluation: An allocation of one 0-1 sircraft per day proved to be inadequate to support the Group mission over three provinces. These three hours daily had to be used for artillory registration, convoy coverage and visual reconnsissance, although limited assistance was provided through both Pleiku and Kentum Province when their requirements were such that they could assist. Idmitations existed, however, in that missions allocated to a province were not permitted to leave that province. During February through April when major tactical activity was occurring at both Fire Base 6 and Phu Nhon, the Group attempted to provide acrial support to both locations in addition to covering convoys going to those areas carrying ammunition, supplies and weapons. This necessary division of attention resulted in barely marginal coverage of each area. Many targets were developed and fired as unobserved missions which sculd have been adjusted on by an observer had air assets been available. Battle damage assessments could not be made, nor could enomy forces be pursued after engagement because of lack of aircraft.
- (3) Recommendations: That 52nd Artillery Group be given three 0-i siroraft allocations per day to facilitate the accomplishment of requirements inhorant with the Groups mission of providing artillery support in Northern Military Region II. Three allocations should be adequate to accomplish all required registrations, convey coverages and other such tasks and yet provide aircraft for target acquisition and evaluation of artillery effectiveness.
- (4) Commander's Action: A request to effect an increase in 0-1 aircraft allocations to a total of 3 per day was forwarded to higher headquarters.
  - e. Operations:
- (1) Observation: The sapper attack on LZ Casis on 30 October 1970 indicated serious deficiencies in fire base security planning. \*
- \* The sappor attack on LZ Casis was not discussed in previous ORLL because the attack occurred two days prior to the end of the reporting poriod.

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SUBJECT: Operational Report-Lessons Learned of 52d Artillary Group for
Period Ending 30 April 1971, RCS: CSFOR-65 (R-3)

- (2) Evaluation: Had certain preventative measures been taken the results of the sapper attack would have been considerably lessened.
  - (3) Recommendations:
- (a) Protective wire must be cleared of vegetation and checked on a regular schodule.
  - (b) Units must patrol outside of their perimators.
- (c) Perimeter bunkers must have adjacent femoles or fighting positions to preclude personnel being trapped in unionable positions.
- (d) Sensors or radar should be employed in areas not under direct observation. In addition, hand flares and other means of illustration should be utilized on areas of suspected movement.
  - (e) Perimeter guards must be trained in night target detection.
- (f) Perimeter towers should be backed up with a system of for-holes and fighting positions.
- (g) Porsonnel should be aware of the potential intelligence value of all items of enemy equipment.
- (h) All units should have an emergency illumination system to identify the perimeter, the direction of attack, and a helicopter (medivae) landing area.
  - (1) Weapons should be test fired periodically.
  - (4) Command Actions
- (a) The recommendations above have been integrated to the maximum possible extent on all 52nd Artillory Group fire bases.
- (b) A daily security report concerning IZ Oasis is rendered to this headquarters.
  - d. Organisation: None
  - e. Training: None
  - f. logistics:

AVOG-OP 1 1/29 1971 SUBJECT: Operational Report-Lessons Isamed of 52d Artillery Group for Period Ending 30 April 1971, ECS: CSFOR-65 (E-3)

## (1) Supply Activities:

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- (a) Observation: As support units continue to inactivate, classes of supply, II, IV and II are becoming more difficult to obtain.
- (b) Evaluation: Barrier material has been one of the more difficult items to obtain. Follow up setion on the status of requisitions has indicated the following: 1) Requisitions have been given a status of filled and shipped but are never received by the unit. 2) Requisitions on 02 priority that cannot be immediately filled are cancelled.

  3) He substitutions of like items is considered, i.e. concertina wire/concertina tape. Scarcity of self-services supply items has also created problems in that units have periodically had to buy dishwashing seep and insecticide from the unit fund to continue samitary mass operations. The non-availability of plastic tableware, paper plates and paper sups in sufficient quantity to support sustained field operations has been a constant source of concern. Supply lines for FAL have suffered greatly during recent menths, many items which would normally be received through supply channels now have to be obtained from property disposal requiring more time and personnel from the already evertended maintenance sections of the battalions.
- (c) Recommendation: Requisitions for items such as barrior material are normally handcarried to USASUPCOM Cam Renh Ray. It is recommended that the individual remain at the support command until a shipping number can be obtained. In addition to handcarry requisitions, priority 12 requisitions should be submitted so that Partial fills can be completed. For items obtained from SSSC, battalion and Group level 54 must insure that want slips are submitted promptly and, if necessary, staff coordination be made with support commands. It must be the responsibility of personnel shopping at SSSC to keep \$4 informed of shortages. For items of FLL it is imporative that maintenance personnel be kept abreast of actions required to obtain parts.
- (d) Command Action: The Group commander has offected personal coordination with Support Commanders and with the Direct Support Maintenance commander. Additionally an aggressive follow-up policy has been instituted to include continuous follow-up on the part of the SRAC Artillory Staff on critical items.

#### (2) Transportation Assets:

(a) Observation: During the last three menths transportation units have increased Keystone activities. This has resulted in tractor trailer rigs and 5-ton trucks having to be obtained from the Qui Mon area.

- (b) Evaluation: Transportation assets in Pleiku have been reduced to six 5-ten tractors. The last two months have seen a large expenditure of assemblican. In order to fulfill the requirements for assemblican resupply, transportation has had to be obtained either from Qui khon or by declaring a Combat emergency. Neither solution is entirely satisfactory. The long distance and constant coordination/supervision of drivers alows delivery times. This has on occasion governed the firing programs of the heavy batteries.
- (c) Recommendation: Higher commands need insure that transportation assets can be made available when required. The 52nd Group's area of operations periodically has high enemy activity. At these times additional assets are required to accomplish the mission. All personnel who may become involved must remain knowledgable of where transportation can be obtained when needed so that an awareness is maintained of the time element and assets which can be obtained.
- (d) Command Action: Commanders at all echelens need to keep staff personnel informed well in advance of upcoming operations and insure that lisison is established with support units so that assets can be allocated well in advance.

#### (3) Maintonance:

- (a) Observation: A float M107/M110 is an absolute necessity. Due to constant firing in support of tactical operations the maintenance of 175mm guns has become a problem requiring numerous evacuations to DS maintenance.
- (b) Evaluation: Since 9 February all firing battories of the 7-15 FA have displaced to field locations in support of ARVN operations. Over 9000 rounds of 175m ammunition were fired during this period of time, the majority of which were some 3 from unimproved pads. This firing under less than ideal conditions has created a drastic increase in downtime for the Mi07's. During April we have had weapons deadlined on 61 occasions for an accumulated 143 days deadline time. During this period the float was in continuous use. At no time during this period have all Mi07's organic to the 7-15 FA been operational. During this period, 18 weapons have required evacuation to the DS maintenance unit. Weapons have remained at the 62nd Maintonance Battalion for an average of 4.75 days. This means that an average of 3 weapons were in support maintenance throughout the month of April. In addition 11 weapons were repaired by contact teams at the firing location.
  - (c) Recommendation: In order to maintain the schodule of

quarterlies, it is recommended that the float M107/M110 be retained by the 62nd SSM Battalian for 7th Battalian, 15th Field Artillary at Pleiku until the tactical situation in Northern PR II decreases in intensity.

(d) Command Action: The Group commander has effected correspondence in order to retain the float.

## (4) Assemition:

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- (a) Observation: The ASP in Pleiku is operated by ARVN with American advisors. The stockage at the ASP is based on past usage.
- (b) Braluation: Stockage levels at the ASP were low due to limited expenditures in the past. However, during the last two months expenditures have increased sharply. This has resulted in combat emergencies having to be declared for resupply.
- (c) Recommendations: Even though expenditures may be low, stockage remains at a level high enough to maintain adequate resupply for units which become engaged in heavy contact. Coordination must be maintained between support facilities and line units so that sufficient quantities can be moved well in advance of large operations. This will be necessary if, with reduced transportation assets, a surge within the ammunition pipeline is to be evoided.
- (d) Command Action: Insure staff remain abreast of upcoming operations so that proper coordination can be maintained.
  - g. Communications: None
  - h. Materiel: None
  - i. Other:
  - (1) Liaison Representation at Senior ARVN and ROK Headquarters:
- (a) Observation: Liaison representation from the battalion supporting the ARVN or ROK operation is by virtue of organization limited to a company grade officer. In many cases the lack of a field grade officer has resulted in less than a satisfactory exchange of timely information.
- (b) Evaluation: Due to the social structure of both Vietnam and Koroa, the rank of an individual often overrides his ability. This was the case on two occasions when a qualified company grade LNO was

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unable to commicate with his counterparts in a manner which would have improved operations.

- (e) Recommendation: Group headquarters should provide a field grade officer as the OIC of the US Artillary Maison Section when senior allied headquarters are conducting tactical operations supported by a bettelien of the Group. This officer will have to be one of the primany staff officers; however, it is felt that the benefit gained in closer operdiration is worth the temporary loss of the staff officer.
- (d) Command Action: This headquarters has exployed this techmigue to excellent edvantage on several occasions, utilizing the S2 ama Sa.
  - (2) Fire Support Coordination in Joint and Combined Operations:
- (a) Coservation: Maximum fire support is not achieved in joint and combined operations conducted under ANN control.
- (b) Byalustion: There was several contributing factors which lead to the situation where less than adequate control is expressed by the MVM Fire Support Coordination Element.
- The senior AWN commanders often do not delegate decision authority to the Fire Support Coordinator, necessitating excessive delays while a command decision is sought.
- There is a tendency of commanders, in contact, to request gunships (Cobras) or Tac Air rather than employ artillary. Often the time between the request for sircraft and their arrival on station is excessive. The Fire Support Coordinator cannot override the request and provide immediately responsive artillary support,
- Basessive checkfires often result in the disintegration of lucrative targets. Air corridors and tight FAC control of aircraft are not as a general rule employed. The solution is to effect a checkfire within the entire area of operations of the unit requesting the air strike.
- Fire central measures such as no fire lines, fire support coordination lines, no-book lines and phase lines are selden used. Normally a regiment/battalion is assigned an area of operations, the only restriction being that the commander does not employ his direct support fires outside his area of operations. This causes long delays in obtaining tactical clearance for general support fires.

AFUG-OF 5 May 1971
SUBJECT: Operational Report-Lessons Learned of 1808 Methology Group for
Period Ending 30 April 1971, RCS: CSFOR-65 (8-3)

I Often there is no WAF representative in the FSCE which compounds the problem of bringing generates or Zec Air into the area.

#### (c) Recommendation:

- I The immediate solution as far as the GS artillery is concorned is to place the most competent and forceful individuals available as US artillery representatives in the FSCE. These people can work within the going system and usually insure the maximum support possible.
- ANY themselves, encouraged by IS advisors. The importance of crtillery and what it can accomplish for the infantry commander has to be stressed. Once this approclation is acquired the Division Artillery Commander should be nor influential and hopefully be able to do his job. The sender artillery commanders know how to coordinate fires. What they need is backing from the Division Commander together with the authority to get the job done.
- (3) Artillery performance following extended periods in personant base camps:
- (a) Observation: The skility of firing betteries to shoot, move and communicate from field locations following extended periods of time in permanent base camps is noticeably degraded.
- (b) Evaluation: The environment of base cast locations fosters a false sense of equipment, and personnel reliability. Stagnation sets in without periodic exercise and minor deficiencies in equipment and procedures are accepted or go undetected until the battery is required to operate for an extended period of time sway from propared firing positions and permanent facilities. Then these minor deficiencies develop into major problems resulting in non-operative weapons, less than adequate communications and deadlined vehicles.

#### (c) Recommendations:

- i At least every 30 days the battery should be exercised as a complete unit to include all RSOP procedures. If this is not the result of tactical support requirements then the battery should participate in a raid of several days duration. The least desirable solution is a service practice drill conducted away from the base camp.
- 2 Battalions should conduct unannounced firing battery evaluations ommonthly basis and follow up on deficiencies so as to insure

AVCC-OP

1 May 1971 Operational Report-Lessons Learned of 52d Artillery Group for Period Resing 30 April 1971, RCS: CSFOR-65 (B-3)

SUBJECT:

that correct artillery precodures are being followed.

(d) Command Action: As batteries return to base camps, resit and reorganise, the above recommendations will be implemented.

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COL, FA

Commanding

DISTRIBUTION:

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AVFA-AT-D (1 May 71) 1 at Ind SUBJECT: Operational Report-Lessons Learned, Headquarters, 52d Artillery Group for Period Ending 30 April 1971, RCSCS FOR-65 (R-3).

Headquarters, Second Regional Assistance Command Artillery, ATTN: AVFA-AT-D APO 96350

TO: Commanding General, Second Regional Assistance Command, APO 96350

This headquarters has evaluated subject ORLL and concurs.

FOR THE COMPANDER:

EI'LA F. WALKER

Lieutenant Colonel, FA

Adjutant

cf: DA, ACS FOR ATTN: FOR OT UT AVFA-GC (1 May 71) 2d Ind SUBJECT: Operational Report- Lessons Learned of

SUBJECT: Operational Report- Lessons Learned of 52d Artillery Group for Period Ending 30 April 1971, ECS CSFOR-65 (R3) (U)

DA, Headquarters, United States Army Forces, Military Region 2, APO SF 96350

TO: Commanding Officer, United States Army Forces, Military Region 2, Artillery, ATTN: AVFA-AT-D, APO 96350

This headquarters has reviewed the attached report, considers it adequate and concurs with the contents.

FOR THE COMMANDER:

Maj agc Bestan ac

CF: 52d Gp

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AVHDO-DO (1 Nay 71) 3rd Ind

SUBJECT: Operational Report-Lessons Learned of 52d Artillery Group for Period Ending 30 April 1971, RCS: CSFOR-65 (R3)

Headquarters, United States Army Vietnam, APO San Francisco 96375 84 AUG 1971

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- TO: Commander in Chief, United States Army Pacific, ATTN: GPOP-FD APO 96558
- 1. This Headquarters has reviewed the Operational Report-Lessons Learned for the period ending 30 April 1971 from Headquarters, 52d Artillery Group and concurs with comments of indorsing headquarters.

#### 2. Additional comments follow:

- a. Reference item concerning "Supply Activities," page 25, paragraph 2f(1). Continual attention is given to assure that most current interchangeability and substitutability (I&S) tapes are made available to depot stock managers. MREs of support units should be constantly aware of critical requirements in supported units since I&S files are not infallible. DSUs should insure that critical items are added to the CCIL. No action by USARPAC or DA is recommended.
- b. Reference item concerning "Transportation Assets," page 25, paragraph 2f(2). Transportation assets available are those currently located in MR 2 North (QNH Area). Primary coordination requirement is between support and supported unit. This Headquarters will monitor. No action by USARPAC or DA is recommended.
- c. Reference item concerning "Maintenance," page 26, paragraph 2f(3). Concur, however, urgent shortages of Ml07/Ml10 assets with USARV prohibit the issue of weapons for use as operational readiness float. First priority of issue of Ml07s and Ml0s are to fill TOE shortages. Currently, there are insufficient serviceable assets on hand to satisfy both TOE shortages and float requirements. As sufficient serviceable assets become available, consideration will be given to providing an adequate float in the 62nd Maintenance Battalion as well as all supporting DSUs concerned. No action by USARPAC or DA is recommended.

FOR THE COMMANDER:

CPT. AGC.

Assistant Adjutant General

Cy furn: 52d Arty Gp STRAC GPOP-FD (1 May 71) 4th Ind (U)

SUBJECT: Operational Report-Lessons Learned, HQ 52d Artillery Group, Period Ending 30 April 1971, RCS CEFOR-65 (R3)

2 5

HQ, US Army, Pacific, APO San Francisco 96558 17 SEP 1971

TO: HQ DA (DAFD-ZA), WASH DC 20310

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

L.M. OZAKE

CPT. AGG

Asst AG

# CONFIDENTIAL

AVIID-C

SUBJECT: QRLL of 108th Artillery Group

16 May 1971

- 2. (C) Lessons Learned: Commander's Observations, Evaluations, and Recommenda
  - a. Personnels None
  - b. Intelligence: None
  - c. Operations:
    - (1). M-36 Chronógraph.
- (a) Observation: During Operation Bam Son 719 Weather limited observed fires there, eliminating the capability to register.
- (b) Evaluation: The M-36 Chronograph proved reliable through extensive use in lieu of registrations during periods of poor visibility. Operated in the gun position, this equipment enhances the capability of the unit to obtain improved firing data, so as to be able to place more accurate fires on the target. This in effect resulted in a savings in ammunition costs by preventing wasted rounds caused by unrefined data.
- (c) When the M-36 Chronograph is used in conjunction with the M-18 Gun Direction Computer, registration is unnecessary.
- (d) Recommendation: Each heavy artillery battalion be authorized the M-36 Chronograph.
  - (2) Recovery Vehicles
- (a) Observation: The VTR (M578) currently authorized for use by heavy artillery battalions proved inadequate as the sole recovery vehicle under field conditions.
- (b) Bratuation: The M578, the primary recovery vehicle for tactical vehicles in a heavy artillery battalion, is mounted on the same carriage as the 175mm gun and the 8" howitzer. This VTR is adequate for towing these like

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, CONFIDENTIAL DOWNGRADED AT 3 YEAR INTERVALS; DECLASSIFIED AFTER 12 YEARS. DOD. DIR 5200.10. AVIID-C

SUBJECT: ORLL of 108th Artillery Group

chassied vehicles. In a field environment, however, it could not haul the load due to an equality rather than a superiority in power. The VTR should, however, be retained for operations such as changing a power pack, tube charges, and other heavy lift duties within the battalion.

(c) Recommendation: A larger recovery vehicle such as the M88 Tank Retriever should be authorized to each heavy artillery battalion maintenance section in addition to the VTR.

#### (3) Engineer Support

- (a) Observation: Engineer support must be readily available to support heavy artillery position occupations.
- (b) Evaluation: Frequent displacement of heavy artillery, as was the case in Lam Son 719, required construction of new berms, gun pits and overhead cover. A buildozer is an absolute necessity for the extensive work that is necessary in developing these positions.
- (c) Recommendation: Each heavy artillery battalion should have dedicated bulldozer support available to assist in occupying new firing positions.

#### (4) IOD

- (a) Observation: The laser range finder on the IOD is inaccurate.
- (b) Evaluation: The range indicated to the target is often as much as 500meters over or short of the actual target location, depending on the terrain. Haze and fog will disperse the laser beem so that no return is received and no range is indicated.
- (c) Recommendation: The accuracy of the laser and its ability to penetrate haze and fog should be improved.
- (d): Observation: The range of the Night Observation Device is insufficient.
- (e) Evaluation: The present range of the Night Observation Deviceof 1000-2000 meters is not sufficient to allow for observation while within the range of enemy mortars.
- (f) Recommendations: The NOD should be improved to increase the range to a minimum of 10KM.

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SUBJECT: ORLL of 108th Artillery Group

16 May 1971

- (g) Observation: The elevating and traversing handwheels are poorly positioned.
- (h). Evaluation: When sighting through the NOD, the operator cannot reach the right hand traversing wheel. When sighting through the laser he cannot reach the left hand elevating wheel.
- (i) Recommendation: Handwheels should be relocated within easy reach while sighting through the NOD and the laser.
- (j) Observation: There is excessive play in the traversing mechanism.
- (k) Evaluation: Whether the excessive play in the traversing mechanism of the instruments presently in use is a manufactured standard or is due to wear is not known. There should be no movement in the gears once the hand-wheel has been released:
  - (1) Recommendation: Traversing gear play should be eliminated.
  - (5) Fire Support Coordination
- ('a) Observation: During joint operations with ARVN forces in Laos, there was a mismanagement of assets in attacking targets.
- (b) Evaluation: On many occasions air strikes were placed on artillery targets, artillery on good air strike targets and ARA attacking targets far beyond their capabilities. This was a result of targets being passed directly to units without prior planning or coordination.
- (c) Recommendations: On all major operations a combined Fire Support Coordination Element be established to insure that proper coordination is effected and that targets are properly attacked.
  - d. Organization: None
  - e. Training: None
  - f. Logistics: None
  - g. Communications
    - (1) Radio Teletype

AVIID-C

SÚBJECT: ORLL of 108th Artillery Group

16 May 1971

- (a) Observation: During Operation Lam Son 719, the 108th Artillery Group deployed to the field with a headquarters element and two heavy artillery battalions. Since the area of operations was located in a hostile area, the units had to rely upon Radio Teletype Communications for timely and secure transmissions of hard copy traffic.
- 1. Of a total of 13 AN/GRC-142's authorized these units, six were on hand, three of which were operational. When any one of these three sets became inoperative, the operation of Group was severely hampered, particularily during the hours of darkness when courier utilization was impossible.
- (b) Evaluation: The lack of radio sets available and those that became inoperative during the operation was directly attributed to maintenance problems that could not be readily solved at the 1st and 2nd echelon levels.
- Those sets not available for the operation had been deadlined for component items that had been turned in to DSU maintenance prior to the operation.
- 2. The déadline rate of the sets used during the operations was caused by:
- a. Positioning the radio sets too close to the 175mm guns, thus damaging the sets by overpressure.
- $\underline{b}$ . Inability of the radio teletype operators (05C20) to troubleshoot and repair the components, particularily the TT-76 and TT-98 teletypewriters.
- Inability of the Direct Support Maintenance unit, in the area of operation, to either establish a direct exchange program or repair deadlined items in the field.

# (c) Recommendation:

- 1. If radio teletype sets are to be operated in 175mm firing battery positions, they should be located far enough from the guns to preclude any damage. If this is not feasible, then the sets should be off-loaded from the vehicle and sand bagged to provide the shelter protection.
- 2. Radio teletype operators should be given training on how to troubleshoot the set and how to perform maintenance on the teletype equipment.

AVIID-C

SUBJECT: ORLL of 108th Artillery Group

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3. In future operations the Direct Support Maintenance unit should have the capability of either field repair of the AN/GRC-142 or a direct exchange program.

#### h. Material

- (1) 175mm Gun Chassis
- (a) Observation: Major mechanical problems were encountered with the 175mm guns.
- (b) Evaluation: The evaluation of the 175mm gun where it was required to perform in a highly mobile situation proved that the M107 experienced an excessive amount of down time. In a period of 59 days, system breakdowns severely hampered heavy artillery support to maneuver elements. In addition during the same period, out of 1180 available days, the M107 was down 460 days or 39% of the time. These figures are based upon 20 M107's participating in Operation Lam Son 719. This was primarily due to chassis failure.
- (c) Recommendation: The 175mm gun should be mounted on a heavier chassis to sustain the effects of firing and eliminate long periods of down time.

#### (2) Cargo Vehicles

- (a) Observation: During Operation Dam Son 719 a serious short-fall of cargo-capable vehicle availability in the cannon battalions of 108th Artillery Group became apparent.
- (b) Evaluation: The number of vehicles required to support Operation Lam Son 719 and peripheral artillery activities severely taxed the ability of the artillery to maintain the requisite amount of ammunition in its positions. With only a 50% availability rate, the loss of a single truck created a shortfall in resupply and seriously degraded support of ARVN and U.S. Forces Units had to resort to the use of ARVN trucks, engineer dump trucks, and any other vehicle that could be borrowed on an informal basis to augment the assets on hand. However, such assistance was sporadic at best and did not represent an acceptable solution to ammunition hauling requirements.
- (c) Recommendation: Command emphasis be used to establish a high priority for issue to heavy artillery units of cargo vehicle assets as they become available to cover known shortages and to replace retrograded vehicles and combat losses as they occur.

1. Other: None

1 Incl Organization Bruce Hollson

COL, FA

Commanding

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16 May 1971

AVAILO BURNET: CRIL of 108th Artillery Group

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AVII-ATC (16 May 71) 1st Ind SUBJECT: Operational Report Lessons Learned of the 108th Artillary Group for the period ending 30 April, MCS CSFOR - 55 (R3) (U)

DA, HQ, XXIV Corps Artillery, APO San Francisco 96349

Commanding General, XXIV Corps, ATTN: AVII-GCT, APO San Francisco 96349

- 1. (U) This headquarters has reviewed the attached Operational Report Lessess Learned for the 108th Artillery Group and concurs with the report with the exception moted in paragraph 5 below.
- 2. (C) The following items are corrections to the 108th Artillery Group ORLL.
  - a. Paragraph ld. The date 20 April 71 is changed to read 1 February 71.
  - b. Paragraph le (4). PSB A-2 is changed to FSB A-4.
- c. Paragraph If. The rounds fired during December 1970 by the 1st Em, 83a Artillary is changed from 1858 to 9968.
- d. Paragraph 2c (1) (a). The phrase "eliminating the capability to register" is changed to "saverly impairing the capability of observed registration".
  - e. Paragraph 2c (5) (b). Change WARAW to WAFAW.
- f. Paragraph 2c (5) (c). "Fire Support Coordination Element" is changed to read "Fire Support Element".
- 3. (C) Concur with recommendation in paragraph 2c (1) (d) concerning the M-36 chronograph. This requires a change in the MTOE which should be submitted by the originating unit.
- 4. (C) Concur with paragraphs 2c (4) (a) and 2c (4) (1) concerning the IOD with the following comments.
- a. The present IOS is an R&D item and is not intended to be included in the Army System. An evaluation of the IOS by F Battery, 26th Artillery has been forwarded to USARV ACTIV. This evaluation includes all the problem areas mentioned in the 108th Arty Op OKLL.
- b. Paragraphs 2c (h) (a) and 2c (h) (e) indicate that the laser on the ROS is inaccurate. This depends on several factors, such as, accuracy of the survery for the IOS, accuracy of the boresighting of the laser with the bines, and the proficiency of the operator in sighting on the target.

and the state of t

AVII-CI (16 Ety 71)-LC IM

CINETA CONTINUA REPORT Received Located of the 16th Livelling Cross
for the period coding 30 April, Ed CEC - Cf (66) (0)

- e. Pergrain 2s (b) (d) cel 2s (b) (f) state that the resp of the MD is immiliated. At this time there up the excellent resp ED's capacital and being embetted by F bettery, Min intillary. Then ED's have a reason of 3-6 km. Buy represent a considerable immersion over the station ED although they do not have the 10 km resp reconsisted by 1672 intillary (p.
- d. Ferrographs in (h) (g) and in (h). (t) state that the chrothing and traversing included are possity positioned. These should be positioned so that the sportion can easily nove the equipment in animals and elevation with things his eyes off of the temps.
- e. Perceptive is (h) (h) can be (h) (l) state that there is executive play in the traversing maximism. He. Al invident, the MA featony training registration, stated that this is caused by warr can there en the equipment, but by featon.
- 5. (6) Excessor with the recommendation in paragraph to (5) (e) cocuraing Fire Expert Masset. Decement the establishment of enter-inv reciprocal limition between 13 and EVEST raits. This requires editional limited efficient over traditional limited expert.
- 6. (0) General with recommendation in paragraph 2g (1) (c) 2 constraint MATT repolation training. Although MIV Garpo brilling units are not extracted EATT repolation, training of radio teletype operators in translationalisation was implemented 16 May 1971. Geordination was established between the George Artillary G-E Cff, 108th Artillary Group G-E Cff, and the EGM May and GIS of the 65th Maintenance Groups for this training program. The Group Artillary units have grainated 28 May 71 from this training program. Feture classes are placed.

ra es esseria

James F. Lynch

CAJORCEA

Or little Artillery Cross

AVII-CCT (16 May 71) 2d Ind

SUBJECT: Operational Esport - Leasons Learned of the 103th Artillery Group for the period ending 30 April, MS GSF0D-65 (R3) (U)

Da, Hoadquarters, XXIV Corps, AFO 96349 5 JUN 1971

- 70: Commanding Comerel, United States Arry, Vietnam, AFO 96375
- 1. This headquarters has reviewed the Operational Report Lessons Learned for the period ending 30 April 1971 from Headquarters, 103th Artillery Group, and concurs with the report and the comments of the indersing headquarters except as indicated in paragraph 2 below.

### 2. Comments follows

- a. Reference item concerning "Recovery Vehicles," page 7, paragraph 2c(2): Nonconcur. Heavy artillery battalions have only a limited recovery capability by design. Adequate back-up recovery support is available at the direct support unit.
- b. Reference item concerning "Engineer Support," page 8, paragraph 2c(3): Nonconcur. If dedicated bulldoser support means attached bulldoser support, the recommendation is in conflict with standard engineer employment doctrine. The same support can be provided by a direct support engineer unit without transfer of the additional responsibilities involved in attachment of engineer assets to the artillery battalion. The recommendation should read: Each heavy artillery tattalion should have direct support bulldoser assets available to assist in occupation of new firing positions.
- c. Reference item concerning "Radio Teletype," page 11, paragraph 2g(1)(c)3: Concur. However, the 26th General Support Group (G3) supported the 108th Artillery Group during this period and does have repair capability for the AN/GRC-142.
- d. Reference item concerning "175mm Cun Chassis," page 11, paragraph 2h(1): Concur. Unit has been advised to submit an Equipment Improvement Recommendation.
- e. Reference item concerning "Cargo Vehicles," page 11, paragraph 2h(2): Concur. Critical shortages of cargo vehicles do exist within the command.

FOR THE COMMANDER:

STEWART C. MEYER Brigadier General, USA

Acting Chief of Staff

Leward C Meyer

CF:

CG, XXIV Corps Artillery, APO 96349 CO, 108th Artillery Group, AFO 96308

AVEO-ED (16 thy 71) 34 Ind CDATT: Operational Report - Leasons Leasond of the 1982h Artillery Group for the period ending 30 April, EUS EUTC-65 (EG) (V)

Ecceptuarters, United States Arry Victors, APS See Presentees 96375 82 JUL 1971

- TO: Commender in Chief, United States Army Pasific, AFES: GRES-FD, AFO 96558
- 1. This Besignarters has reviewed the Operational Report-Lesson's Learned for the period ending 30 April 1971 from Besignarters, 100th Artillery Group and concern with comments of indepoing besignarters.

## 2. Mitieral contest fellow:

Reference item economing "Corpy Vehicles", page 11, paragraph 2k(1), and 2nd Indersonant, paragraph 2e: Conser. There is a command-wide shortage of cargo vehicles. There are mose in depot stocks and those that became available through Kaystone are ARVS condidates for transfer to fill ARVS requirements. This condition will exist until short Bovenber 71 at which time Keystone ensets should be available to fill occasing-wide shortages. Unit has been so advised.

NO THE COMMISSE:

CPT. INF.

Acting Asst Adjutant General

Cy fere: 108th Arty Sp IXIV Corps GPOF-FD (16 May 71) 4th Ind (U)
SUBJECT: Operational Report-Lessons Learned, HQ, 108th
Artillery Group, Period Ending 30 April 1971,
RCS CSFOR-65 (R3) (U)

HQ, US Army, Pacific, APO San Francisco 96558 18 AUG 1971

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C. 20310

This headquarters concurs in subject report as indorsad.

FOR THE COMMANDER IN CHIEF:

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# CONFIDENTIAL

Inclosure 1 (Organization of 108th Artillery Group to Operational Report - Lessons Learned (Hq, 108th Artillery Group) period ending 30 April 1971 RCS, CSFOR-65 (R3) (U)

1. (U) The following information pertains to Headquarters and Headquarters Battery 108th Artillery Group, and assigned or attached units:

Assigned To	Date (Eff)	Attached To/For	General Order
XXIV Corps	28 Feb 70	XXIV Corps Arty (for all purposes)	USARV GC 652 28 Feb 70
			XXIV Corps 60213 28 Feb 70

2. (U) The following units are currently assigned to the 108th Artillery Group.

Unit	Assigned (Eff)	General Order
8th Bn, 4th Arty	l Nov 67	USARV GO 5501, 28 Oct 67

3. (U) The following units are currently attached for all purposes to the  $108 {\rm th}$  Artillery Group,

Unit	Attached (Eff)	General Order	
1st Bn, 39th Arty	1 Mar 70	XXIV Corps GO 2, 20 Mar 70	
1st Bn, 83rd Arty	1 Mar 70	XXIV Corps GO 2, 20 Mar 70	

4. (U) The following units are under the operational control of the Commanding Officer 108th Artillery Group.

Unit	OPCON (Eff)	VOCG
Btry F, 26th Arty	20 May 70	XXIV Corps Arty 20 May 70
235th FA Det	20 May 70	XXIV Corps Arty 20 May 70
239th FA Det	20 May 70	XXIV Corps Arty 20 May 70
240th FA Det	20 May 70	XXIV Corps Arty 20 May 70
245th FA Det	20 May 70	XXIV Corps Arty 20 May 70
2nd Bn, 94th Arty	24 Jan 71	XXIV Corps Arty 24 Jan 71

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